

REMARKS

Claims 1-17 have been amended. Claims 1-17 remain for further consideration.

The rejections shall be taken up in the order presented in the Official Action.

2-3. Claims 1-2, 9-10 and 17 currently stand rejected for allegedly being obvious in view of the combined subject matter disclosed in U.S. Patent 6,366,927 to Meek et al (hereinafter "Meek") and U.S. Patent 6,366,851 to Chojnacki (hereinafter "Chojnacki").

Claim 1 recites a vehicle navigation system that receives sensor data from a plurality of sensors, and provides a map image that is presented on a display. The navigation system includes "*a navigation map data memory that includes map data indicative of roadways stored in Cornu spiral form*". (emphasis added, cl. 1).

Meeks discloses a method and system for representation and use of shape information in geographic databases. Meeks simply discloses a Bezier curve.

The Official Action contends "*[i]t would have been obvious to one of ordinary skill in the art at the time the invention was made to implement the teach[ing] of Meeks et al. by combining geographic features that are other than straight form to include a Cornu spiral form, [to] accurately store [] different shapes curvature transition curves represent[ing] rivers or curved roads of geographic forms, in order to provide a high level of accuracy in the geographic database.*" (Official Action, page 3). It is respectfully submitted that this combination of the references is improper.

The Official Action contends that one of ordinary skill in the art at the time of the invention would have been motivated to store map data in Cornu spiral form to provide a high

level of accuracy of the geographic database. However, it is respectfully submitted that a fair and proper reading of Meeks and Chojnacki indicates that these references disclose using Bezier curves or spline curve functions in order to reduce the amount of memory required to store mapping databases – not to provide a high degree of accuracy in the geographic database as alleged in the Official Action (see Official Action, pg. 3). That is, a fair and proper reading of both Meeks and Chojnacki indicates that the combined references neither disclose nor suggest employing a Cornu spiral to achieve a high level of accuracy in a geographic database. In fact, Meeks teaches that in a preferred embodiment the system uses a normalized shape array table in order to reduce the amount of memory required to store the curve data (see Meeks, column 10, lines 43-54).

"Obviousness cannot be established by combining the teachings of the prior art to produce the claimed invention, absent some teaching suggestion or incentive supporting the combination." In re Geiger, 2 U.S.P.Q.2d 1276, 1278 (Fed. Cir. 1987). "Although the Commissioner suggests that [the structure in the primary prior art reference] could readily be modified to form the [claimed] structure, '[t]he mere fact that the prior art could be so modified would not have made the modification obvious unless the prior art suggested the desirability of the modification.'" In re Laskowski, 10 U.S.P.Q.2d 1397, 1398 (Fed. Cir. 1989), citing In re Gordon, 221 U.S.P.Q. 1125, 1127 (Fed. Cir. 1984). In addition, "[w]hen the incentive to combine the teachings of the references is not readily apparent, it is the duty of the examiner to explain why the combination of the reference teachings is proper." Ex parte Stone, 2 U.S.P.Q.2d 1788, 1790 (Bd.App. & Int'l 1986) (emphasis added).

As noted above, it is fundamental that obviousness can not be established absent some teaching to combine the references, or a suggestion or incentive supporting the combination of

references. See In re Geiger, at 1278 (Fed. Cir. 1987). In the instant case a fair and proper reading of Meeks and Chojnacki fails to reveal that a person of ordinary skill in the art would combine the references in order to provide a high degree of accuracy as alleged in the Official Action. Hence, it is respectfully submitted that a prima facia case of obviousness has not been presented since there is no proper teaching, suggestion or incentive that would lead one of ordinary skill in the art to modify Meeks based upon the teachings of Chojnacki to create the claimed invention.

4. Claims 3-5 and 11-13 currently stand rejected for allegedly being obvious in view of the combined teachings of Meek, Chojnacki, and U.S. Patent 5,610,815 to Gudat (hereinafter "Gudat").

It is respectfully submitted that this rejection is now moot since claims 1, 9 and 17 are patentable for at least the reasons set forth above.

5. The indication that claims 6-8 and 14-16 recite allowable subject matter and would be allowed if amended to no longer depend from a rejected base claim is noted and appreciated. However, these claims are not being written into independent form at this time since the independent claims from which they depend are allowable for at least the reasons set forth above.

Reconsideration and allowance of claims 1-17 is respectfully requested.

If a telephone interview could assist in the prosecution of this application, please call the undersigned attorney.

Respectfully submitted,



Patrick J. O'Shea
Registration No. 35,305
O'Shea, Getz & Kosakowski, P.C.
1500 Main Street, Suite 912
Springfield, Massachusetts 01115
Telephone: (413) 731-3100
Extension 102